

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	661	381/398.cds.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 08:02
S2	843	381/423.cds.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 14:35

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	33	(tabata near shinya).in. (tanaka near hidekaza).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:13
S3	1742	(independent or continuous) adj foam	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:15
S4	42	edge with ((independent or continuous) adj foam)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:17
S5	11	speaker and ((independent or continuous) adj foam)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:18
S6	46	(independent adj foam) and (continuous adj foam)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:33
S7	15	(surround or edge or speaker or transducer) and ((independent adj foam) and (continuous adj foam))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:25
S8	1043	(surround or edge or speaker or transducer or diaphragm) and ((continuous or independent) adj2 foam)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:27
S9	27	(surround or edge or speaker or transducer or diaphragm) and ((continuous and independent) adj2 foam)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:28
S10	5	both near ((continuous independent) adj2 foam)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:30
S11	86	both with ((continuous independent) adj2 foam)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:30

## EAST Search History

S12	36	"183273"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:34
S13	2	"2001183273"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:35
S14	1	JP2002374593A	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:35
S15	2	"2002374593"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:35
S16	12	edge and resin and independent adj2 foam and continuous adj foam	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:45
S17	3262	ribs with edge with radial	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:48
S18	24	speaker and (ribs with edge with radial)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:50
S19	25	speaker and (ribs with (edge surround) with radial)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:55
S20	1	speaker and (ribs with surround with radial)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:56
S21	219	(ribs with surround with radial)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:56

## EAST Search History

S22	2	(loudspeaker transducer speaker) and (ribs with surround with radial)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 13:57
S23	171	(loudspeaker transducer speaker) and (ribs with surround)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 14:07
S24	1963	(loudspeaker transducer speaker) and ((edge surround) with (concave convex))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 14:08
S25	4	(loudspeaker transducer speaker) and ((edge surround) with (concave and convex) with alternat\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 14:39
S26	660	"381/398".ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 14:41
S27	660	"381/398".ccls. and (@pd<"20020626" @ad<"20020626" or @prad<"20020626" or @rlad<"20020626")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 14:46
S35	595	"381/398".ccls. and (@pd<"20020626" @ad<"20020626" or @prad<"20020626" or @rlad<"20020626")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 16:14
S36	780	"381/423".ccls. and (@pd<"20020626" @ad<"20020626" or @prad<"20020626" or @rlad<"20020626")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 16:35
S37	23226	(outer with thick\$4) and (inner with thin\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 16:35
S38	140	(outer with thick\$4) and (inner with thin\$4) and speaker	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 16:36

## EAST Search History

S39	20	((outer with thick\$4) and (inner with thin\$4)) with edge and speaker	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 16:47
S40	21	outer with inner with speaker adj2 edge	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/12 16:53
S41	14	thick\$4 with speaker adj2 edge	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 07:58
S42	115	thick\$4 with speaker with edge	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:15
S43	2522	speaker with surround	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:16
S44	280	speaker adj surround	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:16
S45	1440	speaker with surround not (surround adj sound)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:17
S47	1388	speaker with surround not (surround adj2 sound)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:17
S48	913	(speaker near5 surround) not (surround adj sound)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:18
S49	727	(speaker near3 surround) not (surround adj sound)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:18

## EAST Search History

S50	383	(speaker near surround) not (surround adj sound)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:18
S51	119	(speaker adj surround) not (surround adj sound)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:19
S52	84	(speaker adj surround) not (surround adj sound) not (surround adj speaker)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:29
S53	11073	matsushita.as. and speaker	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:30
S54	5095	matsushita.as. and surround	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:30
S55	889	matsushita.as. and surround and edge	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:30
S56	33	matsushita.as. and surround and edge and speaker	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:34
S57	47	matsushita.as. and "381".clas. and "181".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:41
S58	4	sharp.as. and "381".clas. and "181".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:42
S59	7	hitachi.as. and "381".clas. and "181".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:43

## EAST Search History

S60	38	"124414"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 08:44
S61	22	"5371805"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 14:13
S62	3179	speaker and (edge surround diaphragm) and skin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:31
S63	507	speaker and (edge surround diaphragm) with skin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:31
S64	65	speaker and (edge surround diaphragm) with skin and foam\$4 and resin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:32
S65	10	speaker and (edge surround diaphragm) with skin and foam\$4 and resin and expansion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:34
S66	28	speaker and (edge surround diaphragm) and skin and foam\$4 and resin and expansion and independent and continuous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:37
S67	83	speaker and (edge surround diaphragm) and (skin layer) and foam\$4 and resin and independent and continuous	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:40
S68	21	speaker and (edge surround diaphragm) and (skin layer) and (foam\$4 adj resin) and (independent continuous)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:41
S69	77	(speaker transducer loudspeaker) and (edge surround diaphragm support) and (skin layer) and (foam\$4 near resin) and (independent continuous)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:43

## EAST Search History

S70	57	(speaker transducer loudspeaker) and (edge surround) and (skin layer) and (foam\$4 near resin) and (independent continuous)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:49
S71	17	(speaker transducer loudspeaker) and (edge surround) same (skin layer) same (foam\$4 near resin)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:54
S72	21	((speaker adj edge) surround) same (skin) same (foam\$4 near resin)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:56
S73	0	(speaker adj (edge or surround)) same (skin) same (foam\$4 near resin)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:56
S74	0	(speaker near (edge or surround)) same (skin) same (foam\$4 near resin)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:56
S75	9	(speaker near (edge or surround)) same (skin)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 15:56
S76	507	381/432.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 16:43
S77	0	381/193.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 16:47
S78	0	381/153.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 16:48
S79	57	29/896.23.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/13 16:49



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S80	5	"10334752"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:16
S81	23	"334752"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:17
S82	29	asymmetric adj diaphragm	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:23
S83	60818	(loudspeaker speaker transducer) and balanc\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:23
S84	2422	(loudspeaker speaker transducer) and balanc\$4 with (diaphragm roll surround edge)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:24
S85	67	(loudspeaker speaker transducer) and balanc\$4 with (diaphragm roll surround edge) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:29
S86	273	(loudspeaker speaker transducer) and (rectang\$4 oval) with (diaphragm roll surround edge) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:30
S87	4	(loudspeaker speaker transducer) and (rectang\$4 oval) with (diaphragm roll surround edge) with thick\$4 with weight	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:31
S88	55	(loudspeaker speaker transducer) with (rectang\$4 oval) with (diaphragm roll surround edge) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:33
S89	164	(loudspeaker speaker transducer) and (rectang\$4 oval) with (roll surround edge) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:34

## EAST Search History

S90	368	(loudspeaker speaker transducer) with (rectang\$4 oval) and (roll surround edge) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:34
S91	113	(loudspeaker speaker) with (rectang\$4 oval) and (roll surround edge) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/14 16:37
S92	21	"783837"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 09:22
S93	98014	"381".clas. "181".clas. (edge surround diaphragm roll) near thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 09:23
S94	42297	"381".clas. "181".clas. and (edge surround diaphragm roll) near thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 09:23
S95	500	("381".clas. "181".clas.) and (edge surround diaphragm roll) near thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 09:24
S96	227	("381".clas. "181".clas.) and (edge surround diaphragm roll) adj thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 09:24
S97	146	("381".clas. "181".clas.) and (edge surround diaphragm roll) adj thick\$4 and direction	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 09:24
S98	939	"381".clas. and (surround roll edge) with (voice adj coil)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 11:21
S99	3	"381".clas. and (surround roll edge) with (voice adj coil) with balanc\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 11:22

## EAST Search History

S10 0	149	"381".clas. and (surround roll edge) with variation	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 11:23
S10 1	17	"381".clas. and (surround roll edge) with variation with (size density thick\$4 thin\$4 balanc\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 11:26
S10 2	20	"181".clas. and (surround roll edge) with variation with (size density thick\$4 thin\$4 balanc\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 11:31
S10 3	110	381/405.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 14:35
S10 4	11	"6088465"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 12:51
S10 5	17	((("6088465") or ("6763120") or ("20010010728") or ("20020051558") or ("4820330") or ("3483945") or ("3180945"))).PN:	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/06/15 13:12
S10 7	732	resonance same balanc\$4 same (diaphragm roll surround edge)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 13:13
S11 0	8076	(resonance with (diaphragm roll surround edge))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 13:16
S11 1	46	resonance with balanc\$4 with (diaphragm roll surround edge)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 13:42
S11 2	363	resonance with thick\$4 with (diaphragm roll surround edge)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 13:43

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S11 3	54	resonance with thick\$4 with (diaphragm roll surround edge) with (direction\$4 rectang\$4 oval asymmetric\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 13:57
S11 4	12	resonance with weight with (diaphragm roll surround edge) with (direction\$4 rectang\$4 oval asymmetric\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 14:02
S11 5	55	((("1854716") or ("1943425") or ("1967223") or ("2234883") or ("2302178") or ("2358823") or ("2439665") or ("2863520") or ("3160716") or ("3862376") or ("4146765") or ("4324312") or ("4646874") or ("5323469") or ("20020005317"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/06/15 14:08
S11 6	55	((("1854716") or ("1943425") or ("1967223") or ("2234883") or ("2302178") or ("2358823") or ("2439665") or ("2863520") or ("3160716") or ("3862376") or ("4146756") or ("4324312") or ("4646874") or ("5323469") or ("20020005317"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/06/15 14:17
S11 7	25	((("3111189") or ("3180945") or ("3334195") or ("3464514") or ("3483946") or ("3570626") or ("4821330") or ("6442282"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/06/15 14:42
S11 8	18	asymmetrical adj diaphragm	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:14
S11 9	4231	(speaker loudspeaker) and (asymmetrical rectangular oval ellipse) and (major minor axis length width) and (thick thin weight center gravity density) and (balance resonance)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:16
S12 0	61	(speaker loudspeaker) same (asymmetrical rectangular oval ellipse) same (major minor axis length width) same (thick thin weight center gravity density) same (balance resonance)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:33
S12 1	622	(speaker loudspeaker) same (surround) same (major minor axis length width)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:34
S12 2	252	(speaker loudspeaker) and surround with axis	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:34

## EAST Search History

S12 3	93	(speaker loudspeaker) and surround with axis and thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:35
S12 4	0	(speaker loudspeaker) and surround with axis with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:35
S12 5	13	(speaker loudspeaker) and surround with direction with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:37
S12 6	42974	(speaker loudspeaker) and (rectang\$4 square)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:37
S12 7	4669	(speaker loudspeaker) and (rectang\$4 square) and (surround)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:38
S12 8	3242	(speaker loudspeaker) with (rectang\$4 square)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:38
S12 9	428	(speaker loudspeaker) with (rectang\$4 square) and surround	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:39
S13 0	281	(speaker loudspeaker) with (rectang\$4 square) and surround and size	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:39
S13 1	1	(speaker loudspeaker) with (rectang\$4 square) and surround and size and slim	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:39
S13 2	1	(speaker loudspeaker) with (rectang\$4 square) and variation near (surround edge roll)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:40

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S13 3	1598	(speaker loudspeaker) with (rectang\$4 square) and (surround edge roll)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:40
S13 4	274	(speaker loudspeaker) with (rectang\$4 square) and (surround edge roll) with (((major minor) adj axis) length\$4 width\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:42
S13 5	156	(speaker loudspeaker) with (rectang\$4 square) and (surround edge roll) with (((major minor) adj axis) length\$4 width\$4) and thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:43
S13 6	23	(speaker loudspeaker) with (rectang\$4 square) and (surround edge roll) with (((major minor) adj axis) length\$4 width\$4) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:45
S13 7	2	(speaker loudspeaker) with (rectang\$4 square) and (surround edge roll) with (((major minor) adj axis) ((length\$4 width\$4) adj direction)) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:46
S13 8	2	(speaker loudspeaker) with (rectang\$4 square) and (surround edge roll diaphragm member) with (((major minor) adj axis) ((length\$4 width\$4) adj direction)) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:47
S13 9	25	(speaker loudspeaker) and (surround edge roll diaphragm member) with (((major minor) adj axis) ((length\$4 width\$4) adj direction)) with thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:50
S14 0	348	(speaker loudspeaker) and (surround edge roll diaphragm) with (((major minor) adj axis) ((length\$4 width\$4) adj direction))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:51
S14 1	1	(speaker loudspeaker) and (surround edge roll diaphragm) with thick\$4 adj (((major minor) adj axis) ((length\$4 width\$4) adj direction) (long short))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:54
S14 2	2	(speaker loudspeaker) and (surround edge roll diaphragm) same thick\$4 adj (((major minor) adj axis) ((length\$4 width\$4) adj direction) (long short))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 15:54

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S14 3	183	(speaker loudspeaker) and (surround edge roll diaphragm) and thick\$4 adj4 (((major minor) adj axis) ((length\$4 width\$4) adj direction) (long short))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 16:14
S14 4	2919	(speaker loudspeaker) and (surround edge roll diaphragm) and (((major minor) adj axis) ((length\$4 width\$4) adj direction) ((long\$4 short\$4) adj sides))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 16:15
S14 5	583	(speaker loudspeaker) and (surround edge roll diaphragm) with (((major minor) adj axis) ((length\$4 width\$4) adj direction) ((long\$4 short\$4) adj sides))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 16:16
S14 6	317	(speaker loudspeaker) and (surround edge roll diaphragm) near4 (((major minor) adj axis) ((length\$4 width\$4) adj direction) ((long\$4 short\$4) adj sides))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/15 16:17
S14 8	475	(speaker loudspeaker transducer) and (thick\$4 adj side)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 09:36
S14 9	71	(speaker loudspeaker transducer) and (thick\$4 adj side) same (thin\$4 adj side)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 09:39
S15 0	19	(speaker loudspeaker transducer) and (thick\$4 adj edge) same (thin\$4 adj edge)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 09:42
S15 1	0	(speaker loudspeaker transducer) and (thick\$4 adj surround) same (thin\$4 adj surround)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 09:57

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Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S2	413	((tabata near shinya) or (tanaka near hidekazu)).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 10:39
S3	815552	matsushita.as.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 10:39
S4	13258	matsushita.as. and (speaker loudspeaker)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 10:40
S5	3438	matsushita.as. and (speaker loudspeaker) and (edge surround diaphragm roll)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 10:40
S6	3173	matsushita.as. and (speaker loudspeaker) and (edge surround diaphragm roll) and (@pd<"20020626" or @ad<"20020626" or @prad<"20020626" or @rlad<"20020626")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 10:42
S7	437	matsushita.as. and (speaker loudspeaker) and (edge surround diaphragm roll) and (@pd<"20020626" or @ad<"20020626" or @prad<"20020626" or @rlad<"20020626") and thick\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 10:43
S8	179	matsushita.as. and (speaker loudspeaker) and ((edge surround diaphragm roll) with thick\$4) and (@pd<"20020626" or @ad<"20020626" or @prad<"20020626" or @rlad<"20020626")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 11:21
S9	14	matsushita.as. and (speaker loudspeaker) and ((edge surround diaphragm roll) with asymmetrical) and (@pd<"20020626" or @ad<"20020626" or @prad<"20020626" or @rlad<"20020626")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/19 11:26